CLAIMS

1. (Previously Amended) A computer-storage medium storing processor-executable instructions that, when executed by a processor, perform acts comprising:

obtaining a digital good;

partitioning the digital good into a plurality of regions;

calculating rational statistics of one or more the regions of the plurality, so that the statistics of a region are representative of the region, wherein the calculating comprises generating the rational statistics of one or more regions of the plurality via a hashing function having a quotient of two weighted, linear, statistical combinations and wherein the rational statistics are semi-global characteristics, wherein numerator of the quotient is a first of the two weighted, linear, statistical combinations and wherein denominator of the quotient is a second of the two weighted, linear, statistical combinations ;

quantizing the rational statistics;

marking the digital good with the quantized rational statistics of the plurality of the regions.

2. (Previously Canceled)

3. (Previously Canceled)

4. (Previously Amended) A medium as recited in claim 1, wherein the hashing function is represented by:

$$h_i = \frac{\sum_{j \in R_i} \alpha_{ij} s_j}{\sum_{j \in R_i} b_{ij} s_j}$$

where:

- α_{ij} is the jth element of α_i and α_i are a pseudo-random generated weight factors;

- b_{ij} is the jth element of b_i and b_i are a pseudo-random generated weight factors;

- s denotes the digital good of dimension $N \times 1$;

- R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.

5. (Original) A medium as recited in claim 1, wherein the partitioning comprises segmenting the digital good into a plurality of overlapped regions.

6. (Original) A medium as recited in claim 1, wherein the marking comprises embedding a watermark via quantization.

7. (Previously Cancelled)

8. (Previously Cancelled)

9. (Previously Amended) A computer-storage media storing processor-executable instructions that, when executed by a processor, perform acts comprising

obtaining a digital good; and

using quantization, marking the digital good with a watermark, wherein such quantization is based upon semi-global characteristics of regions of the digital good, wherein such semi-global characteristics are generated via a hashing function employing a quotient of at least two weighted linear combinations of statistics of the regions of the digital good, wherein numerator of the quotient is a first of the two weighted, linear, statistical combinations and wherein the denominator of the quotient is a second of the two weighted, linear, statistical combinations.

10-12. (Previously Cancelled)

13. (Previously Amended) A system for facilitating the protection of digital goods, the system comprising:

a partitioner configured to segment a digital good into a plurality of regions;

a region-statistics calculator configured to calculate rational statistics of one or more of the plurality of regions, wherein the statistics of a region are representative of that region, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function having a quotient of two weighted, linear, statistical combinations and wherein the rational statistics are semi-global characteristics, wherein numerator of the quotient is a first of the two weighted, linear, statistical combinations and wherein and the denominator of the quotient is a second of the two weighted, linear, statistical combinations;

a region quantizer configured to quantize the rational statistics of a region; and

a digital-goods marker configured to generate a marked good using the quantized rational statistics.

14. (Original) A system as recited in claim 13, wherein the region-statistics calculator is further configured to generate the rational statistics of one or more regions of the plurality via a hashing function.

15. (Previously Canceled)

16. (Original) A system as recited in claim 13, wherein the partitioner is further configured to segment a digital good into a plurality of overlapping regions.

17. (Previously Amended) A system as recited in claim 13, wherein h of the hashing function is represented by:

$$h_i = \frac{\sum_{j \in R_i} a_{ij} s_j}{\sum_{j \in R_i} b_{ij} s_j}$$

where:

- a_{ij} is the jth element of a_i and a_i are a pseudorandom generated weight factors;

- b_{ij} is the jth element of b_i and b_i are a pseudorandom generated weight factors;

- s denotes the digital good of dimension N × 1;

- R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.

lee&hayes The Business of IP®

www.leehayes.com ⊛ 509.324.9256

18. (Currently Amended) A computer-storage medium storing processor-executable instructions that, when executed by a processor, perform acts comprising:

obtaining a digital good;

partitioning the digital good into a plurality of regions, wherein the partitioning comprises segmenting the digital good into a plurality of overlapped regions;

calculating rational statistics of one or more the regions of the plurality, so that the statistics of a region are representative of the region, wherein the rational statistics are semi-global characteristics and stay approximately invariant under any local magnitude-scaling of the digital good;

quantizing the rational statistics;

marking the digital good with the quantized rational statistics of the plurality of the regions, wherein the marking comprises embedding a watermark via quantization,

wherein the calculating comprises comprising:

generating pseudo-random weight factors, *a* and *b*;

generating the rational statistics of one or more regions of the plurality via a hashing function, *h*, that hashing function having quotient of two weighted, linear, statistical combinations, and where

$$h_i = \frac{\sum\limits_{j \in R_i} \alpha_{ij} s_j}{\sum\limits_{j \in R_i} b_{ij} s_j}$$

where:

- α_{ij} is the jth element of α_i and α_i are a pseudo-random generated weight factors;

- b_{ij} is the jth element of b_i and b_i are a pseudo-random generated weight factors;

- s denotes the digital good of dimension $N \times 1$;

R_i are the plurality of regions, where $R_i \subseteq \{1,2,...,N\}$.